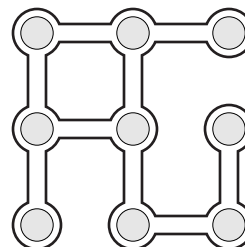
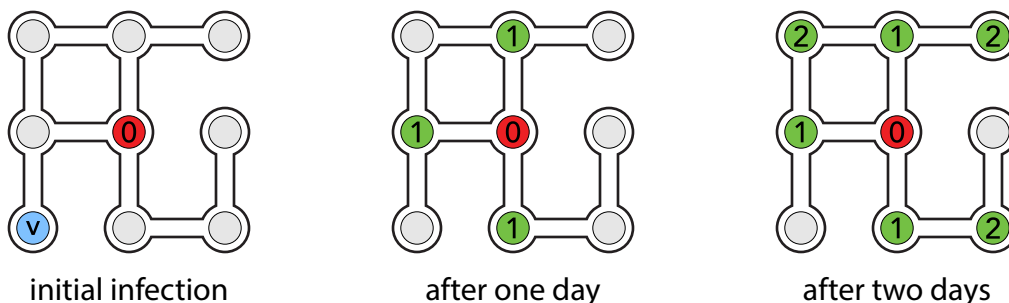


A pathogen is spreading through a small population. The contact chart shows this population, with each person represented by a dot, and the daily interactions among the population, represented by the connections between the dots. This particular pathogen takes one day to infect all those that come into contact with an infected person, unless they are vaccinated against the pathogen.



This example shows how the infection spreads through a population over two days. Notice that those who are vaccinated (blue dots) do not become infected, nor do those who are more than two "contact days" away from the initial infection.



In each puzzle, you are given a contact chart that shows who is infected (green dots) and who is not infected (grey dots). You also know how many days the pathogen has had to spread, and how many people have been vaccinated. You need to determine who brought the pathogen into the population (in other words, who was the first to be infected).

Here is another example of a contact chart, this time showing those who are infected. The pathogen has had two days to spread, and only one person was vaccinated.

